A New Combination in the Cactaceae, *Opuntia lutea*

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ABSTRACT. A new combination in the Cactaceae, *Opuntia lutea* (Rose) Solomon, is needed to bring one of the species treated in the *Flora de Nicaragua* into conformity with the generic concepts utilized in the *Flora.*

Historically, the genus *Nopalea* Salm-Dyck has been separated from *Opuntia* Miller subg. *Opuntia* based on floral morphology. In *Nopalea*, flowers have a more or less long-exserted style and stamens and the inner tepals are relatively short, erect, and imbricate, instead of spreading as in other species of *Opuntia.* This floral syndrome is an adaptation to hummingbird pollination (Porsch, 1938) and is not considered by many authors to be sufficient for generic recognition (Benson, 1982; Hunt, 1967; Hunt & Taylor, 1986, 1990). Thus, *Nopalea* would be considered a subgroup within *Opuntia.* Because the Opuntioideae, as a whole, have been inadequately studied and little is known about evolutionary relationships within the subfamily, it remains unclear what the relationships are between the species that have traditionally been included in *Nopalea* and the rest of the subfamily. In the *Flora de Nicaragua, Opuntia* is treated in its broad sense, including *Nopalea,* making necessary the following new combination:

Opuntia lutea (Rose) Solomon, comb. nov. Basionym: *Nopalea lutea* Rose, Contr. U.S. Natl. Herb. 12: 405, t. 58. 1909. TYPE: Guatemala. Zacapa: El Rancho, 300 m, 28 Dec. 1907, *W. A. Kellerman 7046* (holotype, US-535175; isotypes, MO-911486, US-535186).

Literature Cited

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Porsch, O. 1938. Das Bestäubungsleben der Kakteenblüte I. Cactaceae 1938(1): 1–80.

NOVON 9: 422. 1999.